

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/053158

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B29C33/38 B29C33/56 B29L11/00 G02B5/08 C03B11/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B29C C03B B29D G02B G02F G21K C23C B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 690 370 A (SKINNER JAMES R) 1 September 1987 (1987-09-01)	1,8,12, 15,19
Y	the whole document	2-4, 9-11,18, 20,21
Y	US 5 838 506 A (KIMURA KAZUMI ET AL) 17 November 1998 (1998-11-17) column 7, line 14 - line 60; claims 1,2; example 2	2,3,10, 11,18,20
Y	GB 1 167 690 A (FORD MOTOR COMPANY LIMITED) 22 October 1969 (1969-10-22) page 1, line 59 - page 2, line 6; claim 6; figures	4,9,21
	----- -/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&amp;\* document member of the same patent family

Date of the actual completion of the international search

27 April 2005

Date of mailing of the international search report

04/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Mathey, X

## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/EP2004/053158

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 229 356 A (PLANAR SYSTEMS INC) 7 August 2002 (2002-08-07) claims 1,6,14-19	12-14
X	US 5 662 999 A (TANIGUCHI YASUSHI ET AL) 2 September 1997 (1997-09-02) column 3, line 1 - line 20	1,8,12, 15,19
Y	column 4, line 50 - line 54 column 5, line 3 - line 17 column 7, line 49 - line 55; examples	4,9-11, 21
Y	US 5 505 808 A (HALLMAN ROBERT A ET AL) 9 April 1996 (1996-04-09) the whole document	4,9,21
Y	GB 1 045 016 A (ARTHUR ELLIOTT; UNIV LONDON KING S COLLEGE) 5 October 1966 (1966-10-05)	10,11
A	page 1, line 35 - page 2, line 12; claims 1-5; figures	16,17
X	US 5 723 174 A (SATO YASUHIKO) 3 March 1998 (1998-03-03)	1,8,12, 19
Y	column 6, line 35 - line 40; claim 1; figures	2,3,10, 11,20
Y	DATABASE WPI Section Ch, Week 199309 23 February 1993 (1993-02-23), Derwent Publications Ltd., London, GB; Class A32, AN 1993-070503 XP002282424 & JP 05 016147 A (OLYMPUS OPTICAL CO LTD) 26 January 1993 (1993-01-26) abstract	2,3,20
Y	EP 0 670 576 A (CITTERIO OBERTO) 6 September 1995 (1995-09-06)	10,11
A	column 3, line 3 - line 18; figures 1,2	16,17
X	US 5 855 966 A (RICHARDS DAVID A) 5 January 1999 (1999-01-05)	1,19
Y	column 4, line 23 - line 33	2,3,20
Y	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 03, 31 March 1999 (1999-03-31) & JP 10 337734 A (HOYA CORP), 22 December 1998 (1998-12-22) abstract	2,3,20

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/053158

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4690370	A	01-09-1987	JP	59135133 A	03-08-1984
US 5838506	A	17-11-1998	JP	3208251 B2	10-09-2001
			JP	7072315 A	17-03-1995
GB 1167690	A	22-10-1969	DE	1948639 A1	09-04-1970
EP 1229356	A	07-08-2002	EP	1229356 A2	07-08-2002
			JP	2002277628 A	25-09-2002
			TW	556004 B	01-10-2003
US 5662999	A	02-09-1997	JP	3231165 B2	19-11-2001
			JP	7138033 A	30-05-1995
US 5505808	A	09-04-1996	NONE		
GB 1045016	A	05-10-1966	NONE		
US 5723174	A	03-03-1998	JP	9301722 A	25-11-1997
JP 5016147	A	26-01-1993	NONE		
EP 0670576	A	06-09-1995	IT	1270022 B	28-04-1997
			AT	166996 T	15-06-1998
			DE	69502749 D1	09-07-1998
			DE	69502749 T2	01-10-1998
			EP	0670576 A1	06-09-1995
			US	5592338 A	07-01-1997
US 5855966	A	05-01-1999	DE	69827457 D1	16-12-2004
			EP	0924043 A2	23-06-1999
			JP	11221774 A	17-08-1999
JP 10337734	A	22-12-1998	US	6156243 A	05-12-2000
			US	2004047938 A1	11-03-2004

BEST AVAILABLE COPY